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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/003,877	10/25/2001	Kenneth W. Kolb	16313/94484-00	6552
33222	7590	12/30/2003	EXAMINER	
JONES, WALKER, WAECHTER, POITEVENT, CARRERE & DENEGRÉ, L.L.P. 5TH FLOOR, FOUR UNITED PLAZA 8555 UNITED PLAZA BOULEVARD BATON ROUGE, LA 70809			COCKS, JOSIAH C	
			ART UNIT	PAPER NUMBER
			3749	

DATE MAILED: 12/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/003,877

Applicant(s)

KOLB, KENNETH W.

Examiner

Josiah C. Cocks

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 and 23-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 16-18 is/are allowed.
- 6) ☒ Claim(s) 1-15, 19, 20 and 23-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 10/22&11/0 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Amendment*

1. Receipt of applicant's amendment filed 10/22/03 is acknowledged.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 6-15, and 28-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Guida et al.* (US # 4,793,323) (cited in applicant's IDS filed 1/08/2002).

*Guida et al.* discloses in Figures 1-14 a thermic module for a self-heating container and method of assembling substantially as described in applicant's claims 1-3, 6-15, and 28-31 including providing a first cup/vessel (4) forming a chamber (7) having plastic walls and containing a first chemical reactant, a second cup/compartment (11) containing a second chemical reactant, an end cap (see Fig. 4), a dividing wall (see Fig. 2), and an actuator (10) for puncturing the dividing wall. *Guida et al.* further discloses a safety vent (14) that is provided against overpressures and which releases at a predetermined pressure (see col. 5, lines 50-58).

In regard to the limitation of claim 1 that the walls of the first cup are formed of a plastic of sufficient thinness and have a sufficiently low Vicat Softening Point such that the walls

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expand upon mixing of the two reactants, *Guida et al.* discloses that the walls of chamber (7) are made of polypropylene (see col. 6, lines 7-9) and describes, in one embodiment, a thickness of the walls as .5 mm (see col. 6, lines 25-30). Applicant discloses in the specification that polypropylene is a material with a suitable Vicat Softening Point and a range of wall thickness from .001 mm to .65 mm (see specification pg. 13). Therefore, the examiner considers that it would be inherent that the walls of *Guida et al.* would have a sufficiently low Vicat Softening Point.

In regard to claims 2, 3, 6-15, and 29, *Guida et al.* discloses a self-heating container that functions for the same purpose as the container of applicant and includes a material and wall thickness described by applicant as desirable. While these claims are limiting to the recited temperatures, wall thicknesses, and materials as noted in applicant's specification (pg. 13), these attributes of the container are described as the equivalent of the polypropylene and wall thickness disclosed by *Guida et al.* Therefore, to have selected a specific temperature, specific wall thickness, or specific material would be simply a matter of optimizing a prior art condition obtainable through routine experimentation and is not regarded as patentably distinct (see MPEP § 2144.05 (II)(A)).

In regard to claim 28, container (3) is placed within vessel (4), which includes a reactant (see col. 5, lines 3-6). Further, this container is enameled before placement in the vessel (see col. 5, lines 9-11). The examiner considers that a person of ordinary skill in the art would reasonably be aware that contaminants on the outer surface of the container (3) would potentially interfere with the exothermic reaction produced in the reaction chamber (7). Therefore, the container would necessarily be sterilized to prevent any contamination.

In regard to claim 31, the vessel/cup (4) is made of plastic and includes plastic walls and the container (3) includes metal walls. The examiner regards the walls of vessel/cup (4) to be shaped to fit within close proximity to the metal internal walls of container (3).

4. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Guida et al.* as applied to claim 1 above, and further in view of *Martin* (US # 2,300,793).

*Guida et al.* teach all the limitations of claims 4 and 5 except possibly for a cutting edge and blunter spreading edge and specifically a plurality of these cutting and spreading edges.

*Martin* teaches a self-heating container in the same field of endeavor as *Guida et al.* wherein the container of *Martin* includes a piercing actuator that includes a plurality of cutting edges (21) and spreading edges (23).

Therefore, in regard to claims 4 and 5, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the actuator of *Guida et al.* to include the multiple edges of *Martin* as this edge configuration facilitates the rapid escape of fluid through the puncture (see *Martin*, page 2, lines 29-39).

5. Claims 19, 20, and 23-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Guida* in view of *Scudder* (US # 5,461,867) (cited in applicant's IDS filed 1/08/2002).

*Guida et al.* discloses in Figures 1-14 a thermic module for a self-heating container and method of assembling substantially as described in applicant's claims 19, 20, and 23-27 including providing a first cup/vessel (4) forming a chamber (7) having plastic walls and containing a first chemical reactant, a second cup/compartment (11) with a lip (see Fig. 2)

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containing a second chemical reactant, an end cap (see Fig. 4), a dividing wall (see Fig. 2), and an actuator (10) for puncturing the dividing wall. *Guida et al.* further discloses a safety vent (14) that is provided against overpressures and which releases at a predetermined pressure (see col. 5, lines 50-58).

In regard to the limitation of claim 1 that the walls of the first cup are formed of a plastic of sufficient thinness and have a sufficiently low Vicat Softening Point such that the walls expand upon mixing of the two reactants, *Guida et al.* discloses that the walls of chamber (7) are made of polypropylene (see col. 6, lines 7-9) and describes, in one embodiment, a thickness of the walls as .5 mm (see col. 6, lines 25-30). Applicant discloses in the specification that polypropylene is a material with a suitable Vicat Softening Point and a range of wall thinness from .001 mm to .65 mm (see specification pg. 13). Therefore, the examiner considers that it would be inherent that the walls of *Guida et al.* would have a sufficiently low Vicat Softening Point.

In regard to claim 24, *Guida et al.* discloses a self-heating container that functions for the same purpose as the container of applicant and includes a material and wall thinness described by applicant as desirable. While these claims are limiting to the recited temperatures, wall thinnesses, and materials as noted in applicant's specification (pg. 13), these attributes of the container are described as the equivalent of the polypropylene and wall thinness disclosed by *Guida et al.* Therefore, to have selected a specific temperature, specific wall thickness, or specific material would be simply a matter of optimizing a prior art condition obtainable through routine experimentation and is not regarded as patentably distinct (see MPEP § 2144.05 (II)(A)).

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In regard to claims 19 and 20, *Guida et al.* teach that the safety vent may be activated at a predetermined pressure (see col. 5, lines 58-61). Therefore, to have selected a specific value for the pressure that activates the safety vent would be simply a matter of optimizing a prior art condition obtainable through routine experimentation and is not regarded as patentably distinct (see MPEP § 2144.05 (II)(A)).

In regard to claims 25-27, *Guida et al.* teach that solid and liquid compounds are combined together in different ratios (see col. 6 through col. 8). Therefore, to have selected specific liquid to solid ratios would be simply a matter of optimizing a prior art condition obtainable through routine experimentation and is not regarded as patentably distinct (see MPEP § 2144.05 (II)(A)).

*Guida et al.* does not disclose that the pressure activated vent includes a vent seal positioned between the end cap and the cup lip.

*Scudder et al.* discloses a self-heating container in the same field of endeavor as *Guida et al.* wherein the container of *Scudder et al.* includes a cup with an annular lip (58) around a lower perimeter, and pressure activated vents (56) that are positioned between an end cap and the cup lip (see Fig. 5).

Therefore, in regard to claims 19, 20, and 23-27, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the vent seal of *Guida et al.* to be located between an end cap and a cup lip as taught by *Scudder et al.* as this vent location is understood in the art to desirably allow the release of gases produced by an exothermic reaction (see *Scudder et al.*, col. 5, lines 1-8).

***Allowable Subject Matter***

6. Claims 16-18 are allowed.

***Response to Arguments***

7. Applicant's arguments filed 10/22/03 have been fully considered but they are not persuasive. Applicant argues that, although the cup of *Guida et al.* is made of a material noted by applicant (see spec. pp. 12-13) and specifies one embodiment of a wall thickness that is within a range noted by applicant (see spec. p. 13), the cup would likely not have a sufficiently low Vicat Softening Point. Applicant simply asserts that 0.5 mm polyethylene would likely not have the proper Vicat Softening Point and argues that *Guida et al.* would not want any plastic expansion. This assertion is not supported by the prior art of record. The examiner considers that the walls of *Guida et al.* would have a sufficiently low Vicat Softening Point to allow some expansion of the cup when heated. The rejection of claim 1 based on the statement of inherency is, therefore, maintained.

***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after



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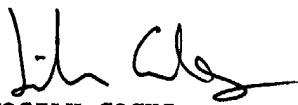
the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Josiah Cocks whose telephone number is (703) 305-0450. The examiner can normally be reached on weekdays from 7:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ira Lazarus, can be reached at (703) 308-1935. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0861.

jcc  
December 28, 2003

  
JOSIAH COCKS  
PATENT EXAMINER  
ART UNIT 3749